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Installation of the onshore segment of the AAG cable that extends from the Sandspit Beach parking lot to the San Luis Obispo cable station is expected to be initiated immediately after certification of this EIR (estimated to be late in the first quarter or early in the second quarter of 2009). Installation of the offshore segment, which extends from the Sandspit Beach parking lot to the 6,000 feet (1,830 m) isobath will commence following acquisition of all required permits (the second quarter of 2009). The effects of construction, operation, and abandonment of both segments are evaluated in this environmental document.

Figure 2-4 shows all cables presently landed at the Sandspit Beach parking lot in Montaña de Oro State Park. The CEQA document information for these prior cable landing projects is listed in Table 2-1.

Table 2-1. Previously-Completed Fiber Optic Cable Environmental Documents

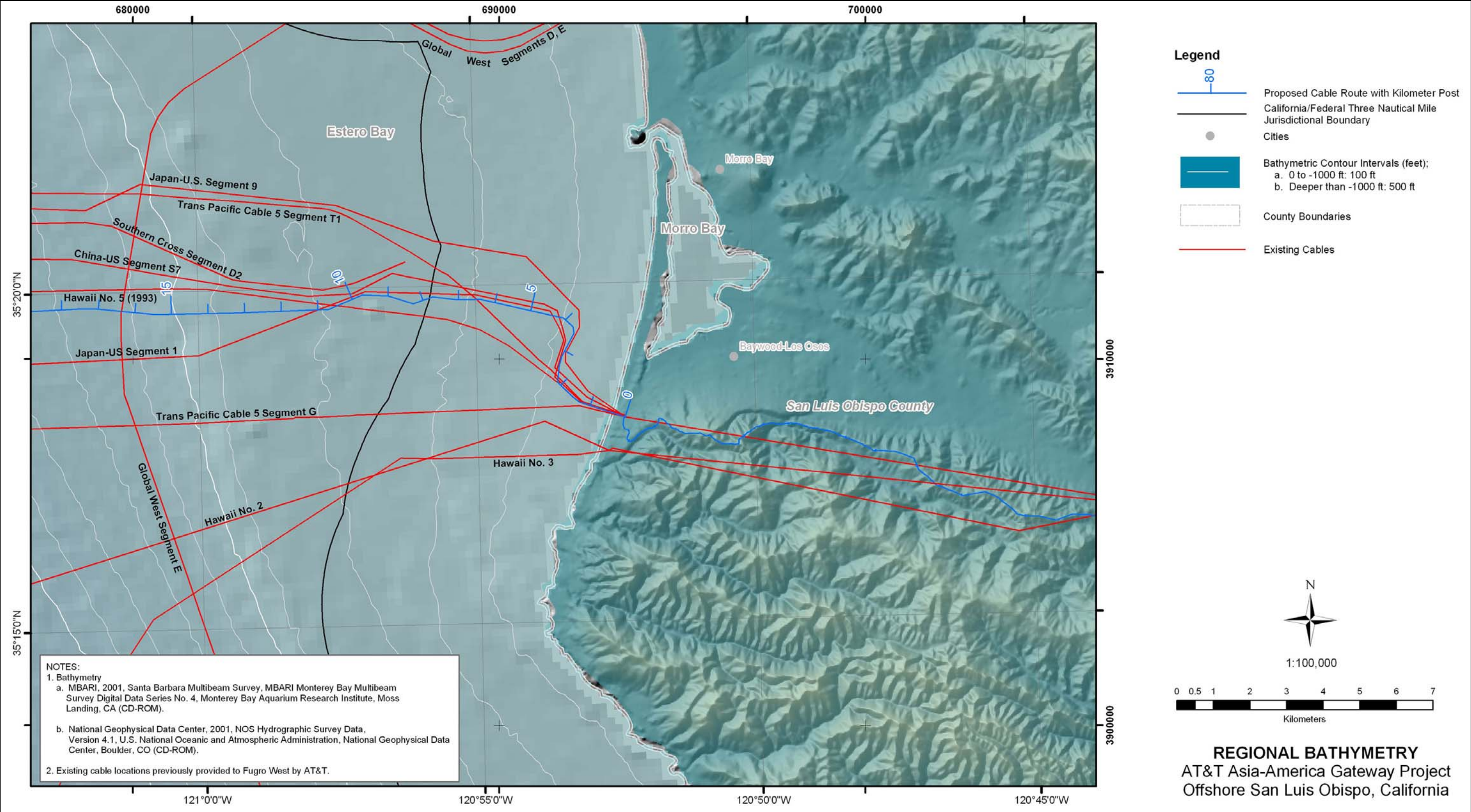
	Project	CEQA Document; Lead Agency Year	State Clearinghouse Number
1.	HAW - 5	Negative Declaration San Luis Obispo County 1991	--
2.	TPC - 5	Negative Declaration State Lands Commission 1994	SCH #94051054
3.	MFS Globenet Corp./WorldCom Network Services	Environmental Impact Report San Luis Obispo County 2000	SCH #98091053
4.	China-U.S. Cable Network Project	Environmental Impact Report State Lands Commission 2001	SCH #99051063
5.	Japan-U.S. Cable Network Project	Mitigated Negative Declaration State Lands Commission 2001	SCH #2000031062

2.2.2 CSLC Lease Boundary and Regulatory Boundary Areas

The marine portion of the proposed AAG fiber optic cable would be laid along a pre-determined route based on the results of an AT&T-prepared cable-siting study/geophysical survey and the findings and mitigation measures contained within this EIR. Typically, cable lease areas are centered along the actual location of the installed cable with a width of 10 feet (3 m). The lease area is entirely underwater, and the CSLC's regulatory authority extends from the mean high tide line seaward to the State 3-mile limit.

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2.3 PROPOSED PROJECT

2.3.1 Project Action

The proposed use of the shore-end existing conduit, identified as Empty Conduit #5, is currently subject to an existing CSLC General Lease-Right of Way Use, PRC No. 8144.1 which was assigned to AT&T in 2006. Under the terms of the existing lease, approval for any future fiber optic cable project in connection with the existing improvement requires authorization from the CSLC. The CSLC is considering an application for a new General Lease-Right of Way Use for this fiber optic cable system crossing State sovereign lands. The lease, if authorized by the CSLC, will allow AT&T to install, use, and maintain the proposed fiber optic cable system.

2.3.2 Physical Description of Proposed Project

The Project will include terrestrial, shore-end, and marine activities.

- Terrestrial activities will occur along an existing conduit system that extends from the Sandspit Beach parking lot within Montaña de Oro State Park, south of the city of Morro Bay, to AT&T's San Luis Obispo Cable Station, which is located just south of San Luis Obispo;
- Shore-end activities are those that occur within the existing subsurface cable conduit system that extends offshore (west) from the Sandspit Beach parking lot manhole to a water depth of approximately 98 feet (30 m). The shore-end activities include those that will occur within the subsurface conduit between the manhole and where the conduit emerges on the seafloor in approximately 33 feet (10 m) of water and then along the seafloor to the 98-foot (30 m) isobath, the depth where cable burial will be completed by divers; and
- Marine activities will then occur along a predetermined course from the 98-foot (30 m) isobath west to destinations in Hawaii, Guam, and Southeast Asia.

These three project components are further described below.

To determine appropriate cable separation, AT&T proposes to use the industry standard "two times the water depth" in order to provide system security and adequate margin for repair operations, if required. For cables installed in deep water, classified as water depths where cables can no longer be recovered by divers, minimum separation is 164 feet (50 m). A minimum separation of twice the water depth or, as applicable, 164 feet

(50 m) is necessary and adequate to ensure that cable repair operations do not violate international and federal law for showing "due regard" for cables belonging to others. In particular, the United Nations Convention on Law of the Sea (UNCLOS) Article 79 (Submarine Cables and Pipelines on the Continental Shelf) stipulates that: "When laying submarine cables or pipelines, states shall have due regard to cables or pipelines already in position. In particular, possibilities of repairing existing cables or pipelines shall not be prejudiced." Furthermore, UNCLOS Article 114 and the U.S. Submarine Cable Act (U.S. Code [USC] Title 47, Chapter 2) impose liability on cable companies that damage other cables during repair operations.

Terrestrial Segment

The terrestrial segment includes an existing conduit system (constructed in 1990) that starts at a beach manhole (installed in 2001) in the Sandspit Beach parking lot of Montaña de Oro State Park and extends easterly (inland) approximately 10.5 miles (16.9 km) to the San Luis Obispo Cable Station (constructed in the 1960s). Beyond the Montaña de Oro State Park boundaries, the conduit system exists entirely within private easements held by AT&T, with the exception of two road crossings at Pecho Valley Road and Clark's Gap Road. This route is commonly referred to as the "ridge" conduit system because it is located along a ridge of hills located just south of Los Osos Valley Road. The terrestrial segment activities include:

- (1) Accessing the various manholes along the route;
- (2) Placing the cable into the conduit system;
- (3) Pulling a terrestrial fiber optic cable and a terrestrial power cable through the existing conduit system; and
- (4) Installing a new ground bed within the existing San Luis Obispo Cable Station property.

Repairing roadways or other corridor features to allow for installation of the new cable is also included in the proposed activities within this segment. No new construction is anticipated for this segment of the Project.

Shore-End Segment

The shore-end segment includes the Sandspit Beach parking lot manhole described above and one, 5-inch (13-cm) diameter conduit (installed in 2001) that extends approximately 2,200 feet (671 m) westerly (seaward) from the manhole and terminates in a water depth of approximately 33 feet (10 m). The shore-end segment activities

include pulling one combined fiber/power marine cable from the offshore conduit terminus through the existing conduit to the Sandspit Beach parking lot manhole. Activities within this segment also include excavation around the offshore terminus of the conduit; cleaning of the conduit; and following cable installation, diver burial of the marine cable from the offshore terminus of the conduit to a water depth of approximately 98 feet (30 m). Other than excavation around the existing conduit and the installation of the proposed cable, no new construction is necessary for this segment of the Project.

Marine Segment

Activities within the marine segment (seaward of the 98-foot [30 m] isobath) include the pre-lay grapnel clearance, and the placement of the cable from west to east (offshore to onshore), and where specified, burial via a combination of plow and Remotely Operated Vehicle (ROV) along a predetermined course seaward of the diver-buried segment. The nearshore (from the conduit terminus, west and north to the 98 foot [30 m] isobath) cable course will follow the "sand channel" route where marine cables have been grouped since 2000 (Figure 2-2). The sand channel route provides greater opportunity for burial of the cable because of the sedimentary nature of the seafloor. Cable position coordinates (the Route Position List or RPL) for the route from the Sandspit Beach parking lot manhole to a water depth of 6,000 feet (1,830 m) are detailed in Table D-1 included in Appendix D.

To minimize the possibility of introducing non-native species into local waters, AT&T will require that any ballast discharges by non-local vessels take place beyond the 12-nm (22.2 km) limit of the territorial seas. Project-related vessels arriving from outside the area are not expected to encounter circumstances requiring ballast water discharge for safe navigation in the nearshore waters.

A log-book will be maintained on all work vessels to keep track of the type, date, time, and location of any equipment that is lost overboard during offshore operations to facilitate identification and location of debris for debris recovery and site clearance verification. Any discharges of ballast water will be required to comply with State ballast water discharge regulations to ensure that discharges do not result in the introduction of non-indigenous marine organisms. Copies of ships' logbooks will be available to the U.S. Coast Guard, or other agencies, upon request to AT&T. Details on the construction activities and proposed methods within each of the aforementioned segments are provided in Section 2.4 below.

1 Project Schedule

2 Installation of the terrestrial portion of the Project is expected to commence immediately
3 after certification of the environmental document late in the first quarter or within the
4 second quarter of 2009. Installation of the shore-end and marine segments is expected
5 to be initiated in the second quarter of 2009 following acquisition of all required permits.
6 Once begun, the terrestrial and shore-end construction activities will be conducted
7 during daylight hours seven days per week, marine activities will be conducted 24 hours
8 per day. The general time frames of specific tasks are as shown in Table 2-2 and
9 schedules for each segment are provided in the segment-specific discussions below.

10 **Table 2-2. Expected Duration of Construction Activities**

Item	Duration
Terrestrial Operations	4 to 6 weeks
Shore-End Preparation	3 weeks
Shore-End Cable Installation	1 week
Marine Cable Lay Operations	3 to 4 weeks
Diver Post-lay Burial Operations	2 to 3 weeks
ROV Post-lay Burial Operations	2 to 3 weeks
<i>Total Estimated Duration</i>	<i>15-20 weeks</i>

12 2.3.3 Cable Design

13 Terrestrial Cable

14 The fiber optic cable will be used to transmit voice, data, and video communications
15 throughout the system, and the power cable (an insulated copper power cable) will carry
16 the required power for the system from the onshore cable station to the marine cable
17 (spliced in the Sandspit Beach parking lot conduit). The fiber cable is a 0.5-inch (in)
18 (1.3-cm) diameter, unarmored, RL cable. The power cable is a 0.6-in (1.5-cm)
19 diameter, unarmored MV-90 cable. While each cable will be installed from different
20 reels and into separate conduits, they will be installed sequentially thus avoiding the
21 need for re-occupying the onshore site.

22 Marine Cable

23 Different marine cable designs will be utilized to provide an appropriate degree of
24 protection for the cable from the variety of geologic conditions encountered during

1 installation and, in areas where cable burial is not possible, from potential external
2 interactions after installation. The fundamental design of these cables is similar and
3 includes rings of wires, copper sheathing, and polyethylene insulation surrounding an
4 inner core of optical fibers. Specifications for the different cable types are provided in
5 Appendix D.

6 The greatest degree of protection is provided by the "double-armored" (DA) design,
7 which can be used in relatively shallow areas of rocky or coarse-substrate and where
8 protection from external threats (e.g., fishing gear or anchors) is warranted. The DA
9 cable includes two surrounding layers of galvanized wires, two layers of polypropylene
10 sheathing, and an outer layer of asphalt based protective coating. The next level of
11 protection is provided by the "single-armored" (SA) design, which is used in areas of
12 rocky or coarse-substrate, and where external threats are decreased. The SA cable
13 includes one surrounding layer of heavy galvanized wires, two layers of polypropylene
14 sheathing, and an outer layer of asphalt based protective coating.

15 The third design is a "light-weight-protected" (LWP) cable, which is similar in design to
16 the single-armored cable but with a single surrounding polypropylene sheath and ring of
17 lighter galvanized wires. The LWP cable is used where the risk of damage due to
18 substrate conditions or external threats is reduced through burial of the cable in
19 sedimentary seafloor habitats.

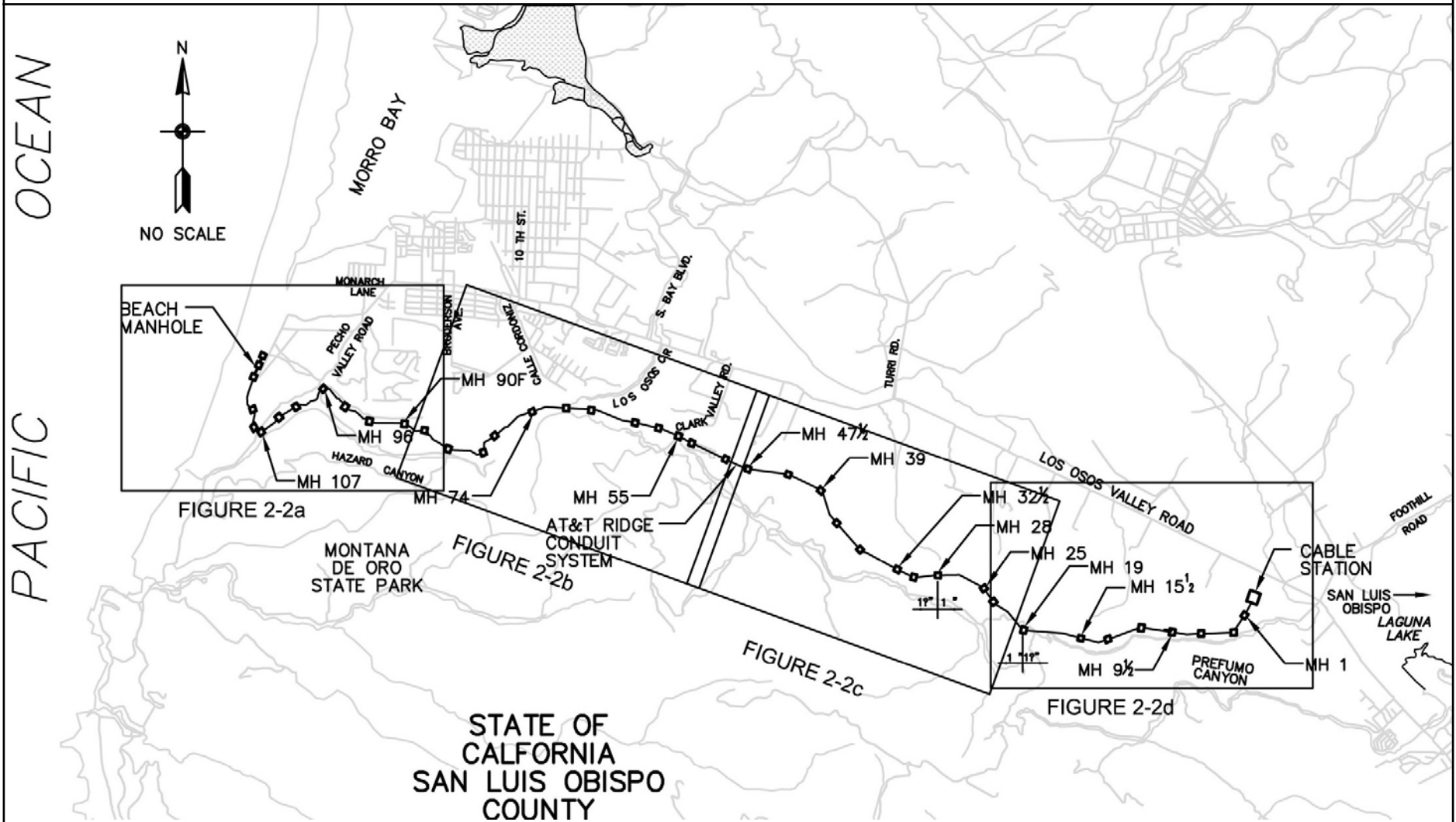
20 **2.4 PROPOSED CONSTRUCTION METHODS**

21 **2.4.1 Terrestrial Segment**

22 Terrestrial operations refer to those tasks that will take place between the manhole in
23 the Sandspit Beach parking lot and the San Luis Obispo Cable Station. These
24 operations will primarily take place within the existing ridge conduit system that was
25 constructed in 1990. Figure 2-5 is an overview and index drawing of the ridge conduit
26 system; Figures 2-5a through 2-5d depict the conduit system, manhole locations, route
27 access paths, staging areas, and ground bed location on aerial photographs.

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